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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,711	03/26/2004	Tuija Hurta	59643.00384	8090
32294	7590	09/19/2007		
SQUIRE, SANDERS & DEMPSEY L.L.P. 14TH FLOOR 8000 TOWERS CRESCENT TYSONS CORNER, VA 22182			EXAMINER WILSON, ROBERT W	
			ART UNIT 2616	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/809,711

Applicant(s)

HURTTA ET AL.

Examiner

Robert W. Wilson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/19/05</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-7, 9-15, 20-24, & 26-31 are rejected under 35 U.S.C. 102(B) as being anticipated by Rasanen (PCT WO 00/44189)

Referring to claim 1, Rasanen teaches: A method of deciding a policy for controlling communication in a communication system (Fig 1 and per Pg 7 line 33 to Pg 9 line 7 performs the method) , the method comprising the steps of :

Determining a type of an access network associated via the communication gateway (The IWU or gateway determines whether RAN-A or RAN-B (access network) will be utilized per Pg 11 line 34 to Pg 15 line 21)

Deciding a policy to apply to communications via the gateway based on information regarding the type of the access gateway (The IWU or gateway determines or decides whether RAN-A or RAN-B has quality of service (bit rate, delay, or signal strength) or policy which will support a request for service from the mobile station and decides the appropriate RAN or access network per Pg 11 line 34 to Pg 15 line 21)

In addition Rasanen teaches:

Regarding claim 2, signaling data from an entity associated with the access network to the gateway (The MS (entity) sends a SERVICE REQUEST (signaling) which defines the services needed from the RAN (access network) to the IWU (gateway) per Pg 11 line 34 to Pg 15 line 21)

Regarding claim 3, wherein the step of signaling data comprises sending type information from the entity to the gateway (The MS or entity sends SERVICE REQUEST (signaling) which has bit rate, delay, signal strength or QoS or type information to the IWU (gateway) per Pg 11 line 34 to Pg 15 line 21)

Regarding claim 4, wherein the signaling step comprises signaling data from the entity in which the entity associated with the access network comprises a node connected to the access network (MS or entity or node sends SERVICE REQUEST (signaling) and the MS is connected to the RAN per Fig 1 per Pg 11 line 34 to Pg 15 line 21)

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Regarding claim 5, wherein the signaling step comprises signaling data from the entity in which the entity associated with the access network comprises a user equipment (MS or entity or user equipment sends SERVICE REQUEST (signaling) and the MS is connected to the RAN per Fig 1 per Pg 11 line 34 to Pg 15 line 21)

Regarding claim 6, wherein the step of signaling data comprises sending a request for a data bearer (MS sends SERVICE REQUEST (signaling) which the examiner interprets a request for data bearer per Pg 11 line 34 to Pg 15 line 21)

Regarding claim 7, including the information regarding the type of the access network in a request for a data bearer (The SERVICE REQUEST defines services (data bearer services) needed in order for the appropriate RAN or access network to be determined per Pg 11 line 34 to Pg 15 line 21)

Regarding claim 9, wherein the step of determining the type of the access network comprises determining the type in the gateway (The IWU (gateway) determines RAN or type per Pg 11 line 34 to Pg 15 line 21)

Regarding claim 10, wherein the step of determining comprises determining the type of access network based on the address of the entity associated with the access network (The MS has an inherent address which is used by the IWU when determining the handover per Pg 11 line 34 to Pg 15 line 21)

Regarding claim 11, wherein the step of determining the type of the access network comprises the sub step of:

Determining the type of the access network supported by the entity associated with the access network (The IWU determines which RAN supports the SERVICE REQUEST from the MS (entity) and determining the type of the access network from the access type supported by the entity associated with the access network (The IWU determines appropriate RAN (type of RAN) based upon the SERVICE REQUEST) per Pg 11 line 34 to Pg 15 line 21)

Regarding claim 12, wherein the step of determining the type of the access network comprises determining the type of the access network based on a characteristics of a message signaled from the entity associated with the access network to the gateway (The IWU (gateway) receives the SERVICE REQUEST and determines the RAN (access network) based upon the inherent parameters in the SERVICE REQUEST)

Regarding claim 13, further comprising the step of identifying a communication session by the gateway (The IWU (gateway) identifies the type of service required for the communication session per Pg 11 line 34 to Pg 15 line 21)

Regarding claim 14, comprising the step of determining in the gateway is a service specific policy is already available for the identified communication session (The IWU (gateway)

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determines if RAN-A or RAN-B has bit rate, delay, signal strength or QoS or policy already available to support the communication or session per Pg 11 line 34 to Pg 15 line 21)

Regarding claim 15, further comprising the step of deciding if a decision by a policy controller is required (The IWU inherently has a controller which determines which RAN will support the MS based upon the SERVICE REQUEST per Pg 11 line 34 to Pg 15 line 21)

Regarding claim 20, wherein the step of deciding the policy comprises selecting an access network (IWU determines appropriate access network based upon SERVICE REQUEST per Pg 11 line 34 to Pg 15 line 21)

Regarding claim 21, further comprising determining if the access network operates in accordance with one of: A second generation standard, a third generation stand, or a wireless local area network standard (Second or Third per Pgs 3-4)

Regarding claim 22, wherein the step of deciding the policy comprises deciding a service specific policy (IWU determines appropriate RAN based upon delay, bit rate, signal strength or QoS or policy per Pg 11 line 34 to Pg 15 line 21)

Regarding claim 23, wherein the deciding step comprises deciding the policy based on the information of the type of the access network, wherein the information is one of a quality of service a security policy, and a charging rule (SERVICE REQUEST is for bit rate, delay, signal strength or QoS per Pg 11 line 34 to Pg 15 line 21)

Regarding claim 24, wherein the deciding step comprises deciding the policy based on the information of the type of the access network (IWU decides RAN based upon which RAN supports the QoS or policy) deciding the control policy applied to the communication via the gateway based on information regarding the type of the access network (IWU decides RAN based upon which RAN supports the delay, bit rate, or signal strength or QoS or policy)

Referring to claim 26, Rasanen teaches: a communication system (The combination of CN, BSC-A, BSC-B, BS-A-1, & BS-B-1 or communication system per Figure 1) comprising:

Different access networks (RAN-A & RAN-B per Fig 1 and per Pg 11 line 34 to Pg 15 line 21)

A gateway (CN per Fig 1) for communication with entities (MS) associated with the different access networks (Ran-A & RAN-B per Fig 1 and per Pg 11 line 34 to Pg 15 line 21)

Access network type determination means to determine a type of an access network of the different access network (IWU (determination means) determines whether RAN-A or RAN-B will be selected per Pg 11 line 34 to Pg 15 line 21)

A decision making entity to decide a policy to apply to the communication via the gateway based on the information of the type of the access network (IWU (decision making entity) decides

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Service provided based upon the SERVICE REQUEST which are associated with appropriate access network per Pg 11 line 34 to Pg 15 line 21)

wherein the communication system control communication based on decision by the decision making entity (The combination of CN, BSC_A, BSC_B, BS_A_1, & BS_B_1 or communication system per Figure 1 controls the service offered as well as handover per Pg 11 line 34 to Pg 15 line 21)

In addition Rasanen teaches:

Regarding claim 27, wherein the entity associated with the access network comprises a node connected to the access network (MS or entity is connected to the RAN per Fig 1 and per Pg 11 line 34 to Pg 15 line 21)

Regarding claim 28, wherein an entity associated with the access network comprises a user equipment (MS or entity or user equipment is connected to the RAN (access network) per Fig 1 and per Pg 11 line 34 to Pg 15 line 21)

Regarding claim 29, comprising a policy controller entity to provide the decision making entity (The IWU has an inherent controller or decision entity per Pg 11 line 34 to Pg 15 line 21)

Regarding claim 30, wherein the decision making entity is provided in the gateway (The inherent controller is located in the IWU or gateway per Fig 1 per Pg 11 line 34 to Pg 15 line 21)

Referring to claim 31, Rasanen teaches: a gateway (IWU) for communication with entities (MS) associated with different access networks (RANs) of a communication system (The combination of CN, BSC_A, BSC_B, BS_A_1, & BS_B_1 per Pg 11 line 34 to Pg 15 line 21 or communication system per Figure 1), the Gateway (CN per Fig 1) comprising:

An access network type determining means for to determine a type of access network (The IWU or determining means determines either RAN-A or RAN-B (access network) per Pg 11 line 34 to Pg 15 line 21)

A decision making means to decide a control policy to apply to communication via a gateway based on information of the type of access network (The IWU (decision making means) decides the bit rate, delay, or signal strength or QoS for associated services or control policy to apply to communication via the CN (Gateway) based upon the SERVICE REQUEST (information) of type of the access network) wherein the gateway control traffic flows based on the decision by the decision making means (CN controls Handover which determined the traffic flows based upon decision from IWU (decision making means) per Pg 11 line 34 to Pg 15 line 21)

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rasanen (PCT WO 00/44189) in view of Chuah (U.S Patent No.: 6,970,423)

Referring to claim 8, Rasanen teaches: the method as claimed in claim 6,

Rasanen does not expressly call for: wherein the step of sending comprises sending the request in which the request comprises another request for creation of a packet data protocol context

Chuah teaches: wherein the step of sending comprises sending the request in which the request comprises another request for creation of a packet data protocol context (col. 1 lines 38-42)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the wherein the step of sending comprises sending the request in which the request comprises another request for creation of a packet data protocol context of Chuah to the SERVICE REQUEST of Rasanen in order to interoperate with a GSM system.

5. Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rasanen (PCT WO 00/44189) in view of Johnson (U.S Patent No.: 5,253,308)

Referring to claim 16, Rasanen teaches: a method as claimed in claim 15 and inherent processor in the gateway

Rasanen does not expressly call for: resolving the address of an appropriate policy controller entity the according to the gateway

Johnson teaches: resolving the address of an appropriate policy controller entity the according to the gateway (resolving the address of processor when processing performed in a parallel processing environment per co. 2 lines 56-67)

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It would have been obvious to one of ordinary skill in the art at the time of the invention to add the resolving the address of an appropriate policy controller entity the according to the gateway of Johnson in place of the single processor of Rasanen in order to build a system which utilizes parallel processing and thus increases the overall performance throughput.

In addition Rasanen teaches:

Regarding claim 17, further comprising the step of sending a request to the policy controller entity wherein the request contains information regarding the type of access network (The MS sends a SERVICE REQUEST which contains parameters for delay, or bit rate, or signal strength or QoS that determine appropriate RAN or access network per Pg 11 line 34 to Pg 15 line 21)

6. Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rasanen (PCT WO 00/44189) in view of Tamura (Patent Pub. No.: US2003/0186692)

Referring to claim 18, Rasanen teaches: the method of claim 15,

Rasanen does not expressly call for: comprising the further step of sending an enquiry for a subscription profile from a policy controller entity to a separate database

Tamura teaches: comprising the further step of sending an enquiry for a subscription profile from a policy controller entity to a separate database (Pg 4 Para[0060])

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the comprising the further step of sending an enquiry for a subscription profile from a policy controller entity to a separate database of Tamura to policy processing of Rasanen in order to improve the speed of the processing by adding a database.

In addition Rasanen teaches:

Regarding claim 19, further comprising authorizing the user and making a policy decision in a policy controller entity (The IWU authorizes the MS to utilize the RAN or handover to the other RAN and while determining which RAN is appropriate per Pg 11 line 34 to Pg 15 line 21)

7. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rasanen (PCT WO 00/44189)

Referring to claim 25, it is within the level of one skilled in the art to implement the method of claim 1 as a computer program. It would have been obvious to one of ordinary skill in the art at the time of the invention to stored the computer program on a computer readable medium in order for the program to be executable on a processor.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 25 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Referring to claim 25, claim 25 is directed to a computer program. A computer program falls under the category of a judicial exception which is non statutory subject matter. A computer readable medium encoded with instructions which perform the following steps is statutory.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. Claim 31 is rejected under 35 U.S.C. 112, first paragraph, for failing to provide adequate written description.

Referring to claim 31, where in the specification is a access network type determining means which the examiner interprets as a processor described and where in the specification is the decision making means described which the examiner interprets as a another processor in the gateway.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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12. Claim 31 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Referring to claim 31, how can the examiner interpret the metes and bounds of the claim for an access network type determining means and decision making means which the examiner interprets as processor if they devices are not described in the specification or shown in any Figure.

Drawings

13. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the access type network determining means and decision making means must be shown or the feature(s) canceled from the claim 31.

No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will

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be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert W. Wilson whose telephone number is 571/272-3075. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on 571/272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Robert W Wilson
Examiner
Art Unit 2616

RWW
9/6/07